REMARKS

The Office Action mailed September 7, 2005 has been reviewed and carefully considered.

Claims 3, 13, 14, and 16 have been amended. Claims 2–8 and 13-21 are currently pending.

By the present Office Action, the specification has been objected to. The corresponding paragraph at page 1, lines 4-6 has been amended to now recite "This application is related to simultaneously filed U.S. Patent Application No. 09/942,810, filed August 30, 2005, entitled METHOD AND APPARATUS FOR SIMULTANEOUSLY RETRIEVING PORTIONS OF A DATA STREAM FROM DIFFERENT CHANNELS, which is incorporated herein by reference in its entirety." Accordingly, reconsideration of the objection is respectfully requested.

By the present Office Action, Claims 3, 13, and 16 have been objected to. The Examiner has stated that the "limitation 'adapting', which makes language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation" (Office Action, p. 2, Section 3). The objection is respectfully traversed. The term "adapt" means "to make fit or suitable by changing or adjusting" (Webster's New World Dictionary of the American Language, David B. Guralnik, Ed. In Chief, William Collins + World Publishing Co., Inc., 1974, p. 15). Thus, it is respectfully asserted that the word "adapting" does not suggest or make optional, but rather requires that the packet structure for the at least one packet of said at least one group of packets to be adapted to conform to a network packet structure for use by said transmission channels, as recited in Claim 3. The same argument/reasoning is provided for Claims 13 and 16, which use the word "adapted". Accordingly, reconsideration of the objection is respectfully requested.

By the present Office Action, Claims 14-15 and 19-21 stand rejected under 35 U.S.C. 112, second paragraph. Claim 14 has been amended to now recite, inter alia, "respective packet groups <u>from among the at least one group of packets</u>". Claim 19 has been amended to now recite, inter alia, " ... at least one packet will be conveyed by <u>ones of</u>

said plurality of transmission channels". Accordingly, reconsideration of the rejection is respectfully requested.

Claims 2-3, 6, 13-14, 16, and 19 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,754,271 to Gordon et al. (hereinafter "Gordon") in view of U.S. Patent Application Publication No. 2004/0032829 to Bonn (hereinafter "Bonn"). Claim 7 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Gordon in view of Bonn in further view of U.S. Patent Application Publication No. 2001/0007557 to Yamada et al. (hereinafter "Yamada"). Claims 4-5 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Gordon in view of Bonn and further in view of U.S. Patent Application Publication No. 2005/0086555 to Langridge (hereinafter "Langridge"). Claim 8 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Gordon in view of Bonn in further view of Yamada and further in view of U.S. Patent Application Publication No. 2002/0154694 (hereinafter "Birch"). Claim 15 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Gordon in view of Bonn in view of U.S Patent No. 5,640,395 to Hamalainen (hereinafter "Hamalainen"). Claims 17-18 and 20-21 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Gordon in view of Bonn in view of U.S. Patent No. 6,373,905 to Yasuda (hereinafter "Yasuda").

It is respectfully asserted that none of the cited references teach or suggest the following limitations of amended Claim 3:

> transmitting, via any one of a plurality of available transmission channels, each of said at least one group of packets, said transmission channels nominally transmitting NULL packets in the event of underutilization, said at least one group of packets being transmitted in place of said nominally transmitted NULL packets to minimize the underutilization of said transmission channels; and

Moreover, it is respectfully asserted that none of the cited references teach or suggest the following limitations of amended Claim 13:

> a network interface, for causing said associated at least one group of packets to be inserted into any one of a plurality of available transmission channels in place of NULL packets nominally transmitted in the event of transmission channel underutilization to minimize the underutilization of said transmission channels,

Moreover, it is respectfully asserted that none of the cited references teach or suggest the following limitations of amended Claim 16:

> wherein said at least one packet associated with said data structure is used to replace at least one NULL packet nominally transmitted in the event of transmission channel underutilization to minimize the underutilization of said transmission channels.

In contrast to the preceding limitations of Claims 3, 13 and 16; Gordon, which was cited against the above-identified portions of Claims 3 13, and 16, discloses "[i]n an embodiment, video encoder 1226 'pads' the graphics portion ... with null data. The null data may be replaced by the graphic grid slices (e.g., **at a later step, within the LNE**). In this embodiment, video encoder 1226 is designed for, and efficiently processes only motion video information, excluding the graphics data" (Gordon, col. 33, lines 35-42). Moreover, Gordon discloses "[a]n aspect of the invention provides techniques to synchronize a number of streams to enable seamless switching at the terminal". Three synchronization methods are provided. In the first synchronization method ... [t]he local neighborhood equipment then adds sufficient null packets to the end of each IPG page so that all IPG pages have the same length. ... The second synchronization method uses buffering for all packets for all IPG pages for each ... sequence. ... Switching packets are then added by the multiplier in the local neighborhood equipment at the end of each stream, which does not include the null padding. The third synchronization methods starts each sequence together and then waits until all packets for all IPG pages have been generated. Once the generation of all packets is completed, switching packets are placed in the streams at the same time and point in each stream" (Gordon, col. 22, line 49 to col. 23, line 7).

It is to be noted that in Gordon, the LNE referred to by the Examiner stands for "local neighborhood equipment", which is proximate to the receiver(s) (i.e., terminals 1208a-n) and not the transmitter (i.e., the head-end 1202). Accordingly, once a transmission has been made from the head-end, the transmission channels have already been filled with relevant data (i.e., non-null data).

Thus, in Gordon, in the first synchronization method, null packets are added at the LNE (which is already after transmission from the head-end) "so that all IPG pages have the same length". The second and third synchronization methods do not utilize null packing, instead adding/placing switching packets in the stream. Underutilization is not considered or even mentioned with respect to these methods in Gordon. In contrast, the present invention as claimed in Claims 3, 13, and 16, transmit at least one group of packets in place of nominally transmitted NULL packets (that are nominally transmitted in the event of underutilization) to minimize the underutilization of the transmission channels. Clearly, the transmission of null packets, without more (i.e., without replacement of null data with non-null data), and with the explicit reason of providing IPG pages of the same length, cannot be said to be for minimizing underutilization of communication channels. Moreover, even assuming *arguendo* that Gordon disclosed transmitting, in place of null packets, at least one group of packets that is to be transmitted via the available transmission channels, the only replacement disclosed in Gordon is performed at the LNE, which is remote from the transmitter (head-end) and, thus, cannot be performed to minimize underutilization of the communication channels, as essentially recited in Claims 3 and 13, as the data had already been transmitted from the head-end over the available communication channels in Gordon before any disclosed replacement is performed at the LNE (see, e.g., Gordon, FIG. 12A).

Accordingly, Gordon, either taken singly or in any combination with the remaining references, does not teach or suggest all of the above-recited limitations of Claims 3, 13, or 16. That is, none of the cited references, either taken singly or in any combination, cure the deficiencies of Gordon.

"To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art" (MPEP §2143.03, citing *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974)). Accordingly, Claims 3, 13, and 16 are patentably distinct and non-obvious over the cited references for at least the reasons set forth above.

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"If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious" (MPEP §2143.03, citing *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)).

Claims 2 and 4-8 depend from Claim 3 or a claim which itself is dependent from Claim 3 and, thus, includes all the elements of Claim 3. Claims 14-15 depend from Claim 13 or a claim which itself is dependent from Claim 13 and, thus, include all the elements of Claim 13. Claims 17-21 depend from Claim 16 or a claim which itself is dependent from Claim 13 and, thus, include all the elements of Claim 16. Accordingly, Claims 2 and 4-8 are patentably distinct and non-obvious over the cited references for at least the reasons set forth above with respect to Claim 3, Claims 14-15 are patentably distinct and non-obvious over the cited references for at least the reasons set forth above with respect to Claim 13, and Claims 17-21 are patentably distinct and non-obvious over the cited references for at least the reasons set forth above with respect to Claim 16.

Having fully addressed the Examiner's rejections, it is believed that, in view of the preceding amendments and remarks, this application stands in condition for allowance. Accordingly then, reconsideration and allowance are respectfully solicited. If, however, the Examiner is of the opinion that such action cannot be taken, the Examiner is invited to contact the applicant's attorney at the phone number below, so that a mutually convenient date and time for a telephonic interview may be scheduled.

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No fee is believed due. However, if a fee is due, please charge the fee to Deposit Account No. 07-0832.

Respectfully submitted,

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